

SIGHT SAVING CLASSES  
IN THE  
PUBLIC SCHOOLS





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Mr. Robert B. Irwin -

With appreciation of all the things  
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to make this report possible.

Hazel C. Hadley

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# SIGHT SAVING CLASSES IN THE PUBLIC SCHOOLS

Presenting the Ohio Plan

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Prepared by  
HAZEL C. HADLEY, Director  
Division of Special Classes

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Under Direction of  
VERNON M. RIEGEL  
*Director of Education*  
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## **FOREWORD**

A bulletin of this type is not, and cannot be, prepared by a single individual. Because of this, the director of special classes wishes to acknowledge the help received from the teachers of sight saving classes throughout the state and from city and state supervisors.

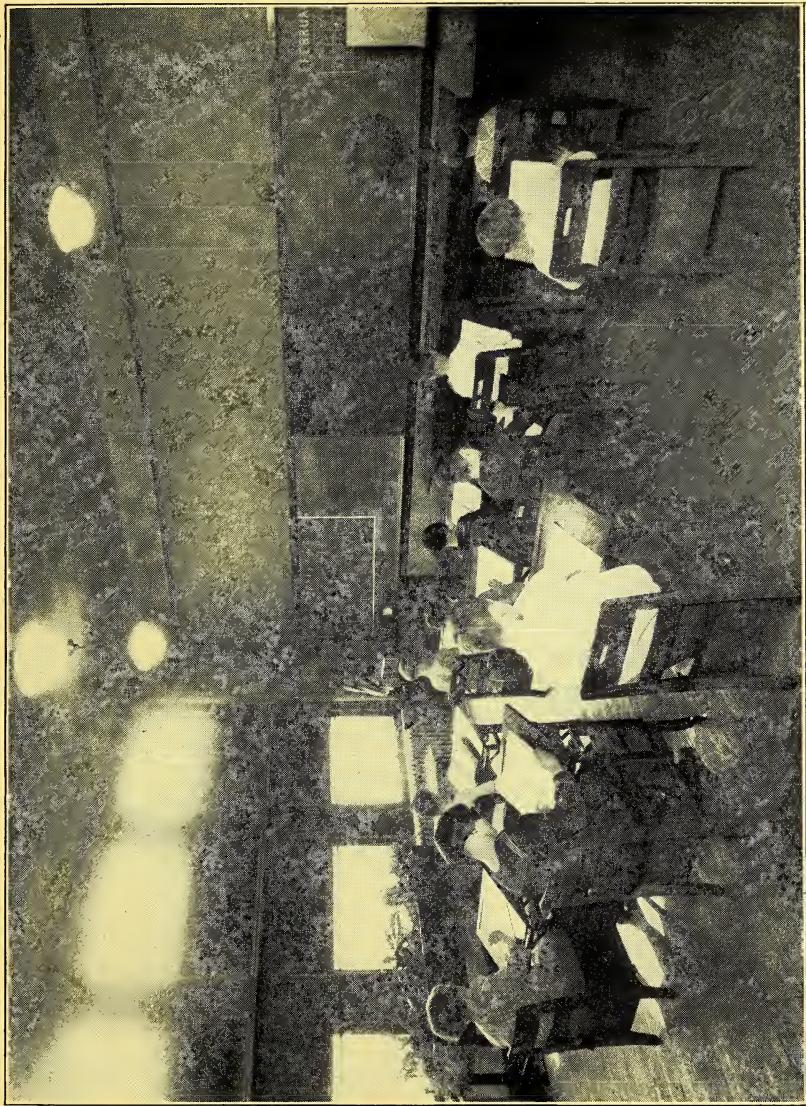
The "Special Studies" are the work of Olive S. Peck, with the exception of the statement of "Binet Testing" which was prepared by Edith M. Taylor.

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A typical sight saving class





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## I.

### **GENERAL DESCRIPTION OF A SIGHT SAVING CLASS**

A sight saving class is a special class maintained to educate pupils whose sight does not permit them to do the work of the regular grades, or who attempt it only at the expense of their already limited sight.

A room is set apart in a regular school building. A northeast exposure is desirable, as the light from that source is the least variable. Walls and ceilings are painted light buff. All walls and woodwork are done in dull finish to eliminate glare. Special artificial lighting to be used on dark days is installed. Pupils' desks are adjustable and movable. Very large type books specially printed are used. The class is usually composed of from twelve to sixteen pupils in four or five grades. Teaching is oral as far as possible. The child prepares his lessons under the care of the special teacher. He recites all oral work in the ordinary recitation room, but the written work is done in the special class with sight saving tools. This plan of cooperation between regular grades and the sight saving class has the advantage of permitting the child with impaired sight to compete socially and educationally with pupils of normal sight. This is a most valuable preparation for his vocational life.

Cleveland, as early as 1911, permitted children in classes for the blind, who had considerable vision, to use ink print books and the blackboard. In the fall of 1913 the Board of Education opened the first sight saving class under the supervision of Mr. R. B. Irwin.

Since that time the work has spread over the state until the school year 1925-26 found 48 classes in operation. This is one evidence of the value of a class to the visually handicapped child and to the school system.

#### *Financial Support.*

Sight saving classes are supported jointly by the city and the state. The law provides that the state may pay the excess cost of educating pupils in a sight saving class, over the cost of educating an equal number in the regular grade, up to a certain maximum limit.

#### **Items of Cost**

There are several reasons why these classes are expensive to maintain. Following are some of the factors entering into this cost.

#### *Enrollment*

One is the small enrollment necessary to give individual treatment of pupils. If the number of pupils becomes too large, the size of the class defeats the purpose for which it is organized.

#### *Textbooks*

A second reason for the excess cost of sight saving classes is to be found in the high cost of textbooks. Due to the fact that all textbooks must be printed in clear, bold type, there is no opportunity to secure the advantage of quantity production. This is easily understood when it is realized that the total sight saving enrollment is only a small fraction of the entire school enrollment. A textbook in geography, for instance, which can be sold to schools in the regular edition at a price of \$1.72 costs \$25 in the clear type edition which the sight saving classes must have.

### *Special Equipment*

A considerable amount of special equipment is necessary for the proper conduct of a class. The room must be equipped with scientifically correct electric lighting. The desks must be movable and adjustable.

### *Transportation*

There are two types of transportation to be considered in connection with a sight saving class: that within and that outside the school district. The board of education of the district in which the child lives may pay his transportation to a class in another district; and the board of education maintaining the special class may provide transportation to the class. Under a later provision of the law this service becomes mandatory, upon order of the Director of Education.

Transportation within the district is the more expensive, and is oftentimes troublesome. It is necessary to provide guides for many of the younger children because of distance to be traveled. If the child attending the special class has a brother or sister in school, arrangement is usually made to have the older child transferred to the district operating the special class. If there is no member of the child's family available for a guide, other arrangements must be made by the parents in cooperation with the teacher. (This duty of providing guides usually seems to fall upon the teacher.) Carfare for both the pupil and the guide is usually paid by the board of education. In some instances it is necessary to pay the guide a small fee in addition to the carfare.

### *Hot Lunches*

Another item of expense chargeable against a class is the cost of hot lunches. Because children in sight

saving classes usually come from considerable distances, it is impossible for them to go home at the noon hour. If there is a cafeteria in the school building, the pupils obtain their lunch in the same manner as the pupils in the other grades. If not, the children bring sandwiches and fruit which are supplemented by one hot dish furnished by the school, and this lunch is eaten in the classroom. It is usually prepared by the teacher with help from the older girls and boys.

Proper nutrition plays an important part in caring for these children, as diseased eyes often show improvement when the general physical condition is improved.

#### **Types of Cases Eligible to a Sight Saving Class**

##### *Extent of Physical Impairment*

Under the Ohio Law the definition of blindness reads as follows: "Any person of sound mind, who, by reason of defective . . . vision . . . cannot properly be educated in the public schools as other children, shall be considered blind . . . within the meaning of sections 7755-57, General Code. But persons with . . . partial vision may also be instructed under the provisions of these sections."† This bulletin endeavors to give certain information concerning children who classify under the last provision — namely, "persons with partial vision."

Children in sight saving classes are *sighted*, not blind. The blind child, in a sense, learns to see through his fingers. The child in the sight saving class gains his information through his eyes, almost as much as the child does who has normal vision. It is the duty of the

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†See Appendix for complete law.

special teacher to provide helpful means for doing this, in order to conserve the already defective vision.

In general, the vision ranges from 50% to 10% of normal vision, after proper correction has been made. In addition, children suffering from progressive eye troubles are considered eligible for these classes.

See Appendix for more detailed information on "types of cases".

### *Mental Capacity\**

In conformance with the law as quoted above, children are admitted to a sight saving class on the basis of a mental test approved by the State Department of Education.

If a child is found to have a double defect, mental deficiency with low vision, he is referred to the special class for the mentally retarded. This is in line with the general policy of permitting the major handicap to determine the placement of the child. However, the teacher of the sight saving class is always willing to assist the teacher of the mentally retarded group in providing suitable work material for the child's limited vision.

### **Method of Locating Pupils**

Pupils who are eligible for sight saving classes are located in various ways:

- a. Children with obvious eye defects are reported by the regular grade teacher to the nurse. The nurse makes the preliminary examination. If in her opinion the child is eligible, arrangements are made for examination by an oculist.

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\*See section on Special Studies for further information.

- b. The school nurses in their routine examinations locate children with eye defects serious enough to make attendance in sight saving classes imperative. These pupils are referred for examination to an oculist.
- c. In cities having school clinics and city eye clinics cases are referred through these media.
- d. In some school systems repeated failure to be promoted constitutes a reason for a thorough physical examination. If the failure is due to an eye defect which makes him eligible, the child is placed in a sight saving class.
- e. Serious defects which would be difficult to locate without a very thorough examination are referred to the classes by oculists. Many of the cases referred in this manner are private patients of the oculists.

#### *Examination required*

Before pupils are accepted for a sight saving class, a report of an eye examination properly made out must be presented to the sight saving supervisor. If the class is full, the name is placed on a waiting list and as soon as the opportunity can be made the child is entered. Every effort is made to take the pupil into the class as speedily as possible.

#### *Cases referred*

The number of cases in Ohio sight saving classes referred by different sources is shown in the following table:

(a) Hospital or city clinics.....	123
(b) School clinics.....	194
(c) School oculist.....	64
(d) Private oculist .....	265
(e) Optometrist .....	3

*Type of eye conditions eligible*

A list of the eye defects referred to Ohio sight saving classes will be found under "Special Studies", page 38.

*Method of receiving re-examination*

It is of utmost importance to have pupils' eyes re-examined at intervals. The frequency depends on the eye condition. Children with progressive myopia should be re-examined at least every six months, and preferably every three months. Pupils having stationary eye conditions due to congenital eye troubles do not need to be re-examined so often.

These examinations are made by school or city clinics, school oculists, or by the child's private oculist. Reports of re-examination are made to the teacher and any recommendations for treatment or training are made at this time. All reports of this nature are confidential.

*Importance of "check up"*

In case the eye report shows any change or deterioration in the eye, steps are taken immediately to make changes which may be beneficial. It may mean a talk with the parents as to a change of diet, or additional reduction in eye work in school, until the next examination shows the trouble is checked or improved.

## II.

### AIMS AND PROCEDURE IN A SIGHT SAVING CLASS\*

In order to understand the reason for the gradual growth and development of the present philosophy of sight saving methods and administration, it is necessary to know how sight saving classes came into existence.

#### *History*

Sight saving classes in America came as the solution of the question of educating the semi-sighted child in the institution for the blind.

The child who had too much sight to read raised dots with his fingers and too little to read ordinary print with comfort and safety was a problem. He did not belong in a blind school, as his need was of a very different type. His approach to knowledge was through his eyes, even though the image might be blurred. The blind child got his concepts through tactful impressions. Obviously, there was little relation between the two methods of instruction. The semi-sighted child's needs were much more closely allied to the educational methods of the regular classroom. It was a question of adapting regular school work to the eye condition.

Educators in work for the blind recognized the fact that the correlation should be between regular schools

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\*A more complete study of equipment and methods for the conduct of sight saving classes will be found in

Methods of Teaching Sight Saving Classes—Estella Lawes, published by National Committee for the Prevention of Blindness.

Sight Saving Classes — Helen J. Coffin and Olive S. Peck, published by Board of Education, Cleveland.

and sight saving classes rather than between classes for blind and the semi-sighted. They put forth their best efforts in organizing this new type of education.

In April, 1913, the first sight saving class in the United States was opened in Massachusetts. The following September, the Cleveland Board of Education opened the first sight saving class in Ohio. The organization of this class was made possible by the enactment of laws providing for the establishment and financial support of these classes as a definite responsibility on the part of the state of Ohio.

The work of these early classes demonstrated the value of sight saving, educationally, socially, medically, and financially. The work spread throughout the state until at present there are more cities in Ohio conducting sight saving classes than in any other state.

Many states are establishing classes using the Ohio plan and modeling laws governing the establishment and financing of these classes after those of Ohio.

One of the interesting developments of this work, as it progresses, is the tendency to include not only semi-sighted pupils, but also those who, although they can see, need special care because of eye conditions which are apt to become worse, often with disastrous results. When this is done these classes may be called sight saving in the strictest sense of the word. These children, usually of high mentality, are pupils of the studious type and must be surrounded by every precaution against incorrect use of their eyes during the period of their lives when the condition tends to become worse.

These safeguards are usually successful in checking serious progression of the eye trouble. This may result in adding several years of useful vision to their working years.

*Selection of pupils*

Upon examination by an oculist, pupils whose eye condition is such that it is impossible or inadvisable for them to be educated using the same educational equipment and methods as pupils of normal sight are assigned to a sight saving class, as was described fully in preceding pages. For details regarding eligibility see "A study of the diagnosis of eye conditions of pupils in Ohio sight saving classes," page 38.

*Size of class*

The enrollment of a sight saving class will vary according to the number of grades represented. The minimum enrollment for organizing a class is eight. The maximum enrollment is sixteen children, if only four grades are represented. (See "Standard Requirements." Appendix.)

It has been necessary in some localities to overload classes in order to serve the needs of the communities. This has not been an ideal condition but sight has been saved. In most cases where the enrollment has exceeded the maximum, the help of a reader has been secured. This plan works well. There is frequently reading and copying that an untrained person can do, which saves the valuable time of the teacher for the more important work.

*Selection of building*

The class should be located in a building housing all grades, if possible, centrally located, and easily accessible to transportation lines.

*Selection of room*

A room of average size with the best possible natural lighting is selected. It is desirable to have unilat-

eral lighting; in no case should a room be chosen which will require the pupils to face windows. This room should have an exposure giving the least variable light, with no glaring roofs or adjacent walls. It is essential that the room have an adequate supply of blackboard space. It is advisable to have the blackboard placed at a distance of about 24 inches from the floor, since the writing can thus be kept on the child's level or below.

The room should be equipped with scientifically planned electric lighting fixtures for use on dark days. Care must be taken of these lights after installation. The bowls should be washed at least every six weeks and bulbs renewed frequently.

Adjustable window shades are installed to control the natural light. Two shades are used at each window. They should be of a neutral tan or gray translucent material, which will transmit light and at the same time diffuse it.

Walls should be decorated in a French gray or buff, with ceilings done in white to which has been added a small amount of light tan. All surfaces must be in mat finish. Buff and cream colors are preferred by many, as a room finished in these colors appears more cheerful.

#### *Equipment of room*

In addition to the usual equipment of a classroom, there must be an adequate amount of cupboard space. The room is equipped with the necessary number of movable, adjustable desks. A table for lunch and manual work, chairs to be used at this table, and a sand table for classes having primary grades are needed.

A typewriter is installed in classrooms which have pupils of the proper age to use it. A typewriter table is also required.

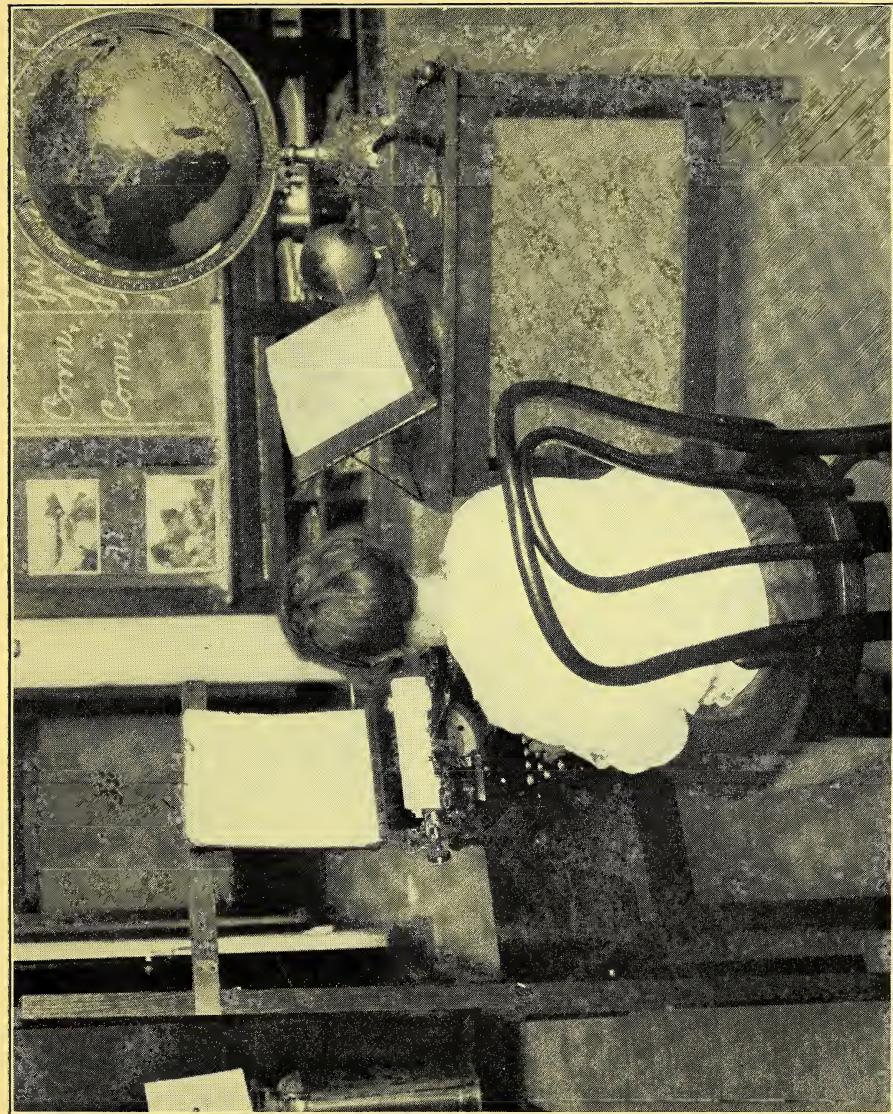
*Supplies*

Paper for use in sight saving class has a dull surface and is cream in color. Some schools use paper with heavy green lines ruled about  $\frac{3}{4}$  inches apart. Paper without lines should be used as much as possible. The lines should serve only as a guide to size, placing, etc.

Heavy lead pencils with soft lead are used. Heavy, soft chalk is used for writing on the backboards.

The books supplied for use by these children are printed in 24-point type (as compared to 10-point ordinary size) on dull cream paper. Special attention is paid to inking and to spacing of letters, words, and lines. This is one of the most expensive items of equipment, but experience has proved it to be a wise expenditure, as the increase in sight saving libraries has made it possible to increase the enrollment of classes. This in turn has helped to lower the per capita cost of maintaining the classes. These books are called clear type books. They are much more expensive than ordinary textbooks. The material to be reprinted in clear type form is selected by an editorial committee of teachers and supervisors of sight saving classes from various parts of the United States. Publishers have been generous in giving permission to reprint copies of the best textbooks used in the regular classrooms. An effort has been made to put into these books only the best and most up-to-date material. A limited amount is printed in clear type each year. As a result of a printing program which has covered a period of nearly ten years, a fairly adequate supply of printed material is available for the pupils in sight saving classes.

A plan of cooperation with other states having sight saving classes has materially reduced the price of



Special sight saving equipment, copy holder, large type typewriter, book rack, globes



these books in the last five years. As more classes are opened throughout the United States, more books will be needed, and production in a larger quantity will cut the cost of these books proportionately.

In cases where the class is located in a building having no facilities for serving and preparing lunch, it is necessary to install an electric hot plate with proper supply of dishes and cooking utensils. Usually one hot dish is prepared for the children at noon.

There are many things in the way of miscellaneous equipment which will prove to be labor saving devices for the teacher and pupils. These will be needed, but space is too limited to list them in the publication.

### *The Cooperative Plan*

The pupils in a sight saving class are not a segregated group. Each child recites all oral work in the regular grade to which he is assigned. He does the written work, reading, and special subjects in the sight saving class room. This plan has been very successful, as the competition keeps the child spurred up to an achievement level on a par with his mental ability.

Every child in a sight saving class is given a mental test. No pupil below normal is accepted. Since these pupils are of approved mental ability, they are expected to keep abreast of the work of the regular grades. Many times they do work so well that they prove to be an inspiration to the pupils of the regular classes.

These pupils must be well trained in concentration and memorization. Instead of reading so much, they must think more about what they hear. They must be taught to let their ears work for their eyes.

### *The aim of sight saving classes*

Sight saving classes have three objectives: first, to save sight, at the same time keeping the child up to standard in school work; second, to teach enough eye hygiene to enable the pupil to care for his eyes properly; third, to give him vocational guidance enough to aid in the selection of a vocation best suited to the eye condition.

### *The program*

The program of a sight saving class is a composite one made up from the programs of each grade represented in the class. The teacher of the regular classroom sends her program to the sight saving teacher and around these the latter must construct a program for her pupil.

In general, sight saving pupils should be in regular classes for all work not involving the use of the eyes. All eye work should be done in the sight saving room with the proper tools, correct lighting conditions, and a teacher who is trained to watch for symptoms of eye and nerve strain.

In making up a program, there are certain points to keep in mind:

1. Periods of eye work must be brief—generally 20 minutes.
2. Follow periods of eye work with work permitting a change of focus for the eye.
3. Give each child his share of the teacher's time.
4. Cover the necessary subjects for the day.
5. Make allowance for the fact that sight saving pupils often do work more slowly than children with normal sight.

6. Permit no home work.
7. Include frequent rest periods for pupils who work under nervous tension.

### *The elementary grades*

In the elementary grades in general, the sight saving teacher will teach all of the reading, writing, written arithmetic and card drills on number combinations, handwork, typing, and eye hygiene. The sight saving teacher will read all assignments of the regular grades when the same material is not found in the clear type books. This may be supplemented by material on the same topic which the child may read for himself.

The sight saving pupil (with the exception sometimes of high myopes) goes to the regular classroom for oral work in spelling, language, history, nature study, geography, physical training, and games. Specially prepared maps are used by the sight saving pupil in the regular room when required. The child may go to the regular room for rote singing, but should not be allowed to read notes unless copied for him in large size.

Pupils in sight saving classes are given special handwork adapted to their eye conditions and correlated with their classwork. They are taught typewriting, using the touch system, not as a vocational possibility, but as a more efficient and speedy method of preparing written work to be read by the regular class teacher. In some school systems, typing is not taught to myopes.

### *The junior high school*

When sight saving pupils reach the junior high school grades, they are handled in various ways:

1. Where there is no separate junior high organization, pupils remain in sight saving class and recite in the seventh and eighth grades located in the same building as the class.
2. In cities where there are several classes, sight saving classes are organized and located in a junior high school building under the care of a special teacher, trained in sight saving methods.
3. In some localities where there are not enough pupils to have a separate junior high center and the class is located in a building not containing a seventh and eighth grade, a reader is hired to read the assignment to the sight saving pupils. This method is the least satisfactory.

### *The senior high school*

The sight saving pupil usually attends the high school in his own district just as the child with normal sight. In cities having trade schools or vocational training classes, the pupil is assigned to the school giving courses best suited to his aptitudes. A reader is provided to relieve him of as much eye work as possible during study periods, by reading lessons and copying work in a form which can be read easily. During this period of his education, the high school pupil is placed where he is independent and may demonstrate habits of conserving sight without constant reminders.

Where there is no visiting teacher or vocational director, the supervisor or sight saving teacher checks upon the achievement and eye condition of the pupil. Advice is given as to choice of subjects. The principal of the school is informed of the precautions to be used

in the care of the eye condition. Teachers are urged to seat the child properly and are informed of the eye condition. Every attempt is made to prevent calling attention unnecessarily to the pupil's difficulty at this most self-conscious age.

Some very excellent work has been done by these pupils in high school. Several have graduated with very commendable records and with no damage to the eyes.

Pupils who are over 16 years of age and show no desire or aptitude for further training are not urged to attend high school. Actual working experience in some vocation which will not cause further injury to the eye is recommended.

#### *Social training*

Teachers of sight saving classes are required to make calls at the homes of their pupils. It is exceedingly difficult to understand a child unless the teacher knows something of the background and home life of the pupil. There are many adjustments which must be made; sometimes adjustments between parent and child, between regular teacher and child, and between medical men and the parents. There are frequently physical conditions which, if remedied, may contribute greatly to the more complete life of the child. In order that this may be done, the teacher must win the confidence of the parents.

Where there is no visiting teacher, the sight saving teacher also finds it necessary to keep in constant touch with the oculist in charge of the child in order to follow out any suggestions for treatment or training which may be made. Social contacts with pupils of the same

age in the regular grades are fostered. Children who are diffident and shy are encouraged to make friendships. Initiative is developed in order that they may live well rounded lives, not only in the future but as a means of present happiness.

### **III.**

#### **TEACHER TRAINING AND SUPERVISION**

Those interested in establishing sight saving classes have long realized that there is a lack of teachers who are trained for this work.

Prior to 1925 a majority of the teachers who were accepted for special classes were without training. They were forced to depend upon what help they could derive from an occasional visit from the city or state supervisor. While it is true that a teacher experienced in grade work may undertake to teach a sight saving class, she does it at the expense of a group already handicapped. The untrained teacher is likely to be so busy developing new educational methods that she forgets to conserve the eyesight of the children, which must always be the primary interest.

During the summer of 1925 the University of Cincinnati co-operated with the National Committee for the Prevention of Blindness and the Ohio State Department of Education in offering a course for teachers and supervisors of sight saving classes. The course was repeated in the summer of 1926 and an advanced course added. These courses offered lectures, conferences on the theory and method of teaching, observation in a demonstration class, and clinical work.

During the school year 1925-26 the Cleveland School of Education and Western Reserve University offered a course in Eye Hygiene. This course consisted of lectures by oculists of Cleveland, lighting experts of Nela Park, and members of the staff of the sight saving

department; visits to school and hospital eye clinics and to the lighting research laboratory at Nela Park. This course was attended by sight saving teachers of regular classes, nurses of Cleveland schools, and also nurses and sight saving teachers of nearby cities.

The courses in both cities were attended largely by teachers in service, as well as by teachers preparing for sight saving work. The results of such training are plainly manifest in the improved procedures that characterize their classroom efforts.

It is a source of great gratification to this division to know that, with few exceptions, all teachers of sight saving classes in Ohio have had special training in addition to their years of experience as teachers in regular grades. The teachers who are lacking in special training are planning to meet the requirements in the near future.

### **Plan for Supervision**

Ohio now has four sight saving supervisors. Cleveland and Cincinnati each has a full-time supervisor, while the other cities maintaining classes have part-time supervision. One supervisor gives part-time service to each of the several cities in northern Ohio which maintain classes, and the other supervisor has southern Ohio aside from Portsmouth, which is under the direction of the Cincinnati supervisor.

This arrangement gives to the class in the smallest community the benefit of the same methods used in the large city systems. The interchange of ideas is good. If one classroom teacher finds some new way to develop a lesson which is valuable to her children, either from an educational standpoint or because of lessening eye strain, that same idea will be carried on to the other teachers by the supervisor as she goes from city to city. The

northern Ohio supervisor is identified on a part-time basis with the Cleveland system, and the southern Ohio supervisor, with the Cincinnati system.

Supervisors are paid by the community in which they work for actual days of service. These salaries are a part of the excess cost of the classes and are charged against the state. Supervisors are responsible to the state director of special classes for the maintenance of certain requirements made standard by the State Department of Education. This is in compliance with Section 7761, G. C., which states:

"The director of education shall prescribe standard requirements for day schools for the deaf, blind and crippled, and other instruction of such children entitled to state reimbursement, which requirements shall include the conditions under which such schools are conducted, the methods of instruction and supervision, the qualifications of teachers and the conditions and terms under which they are employed, the special equipment and agencies for instruction provided, and the conditions of the rooms and buildings in which the schools are held."

Supervisors have paid particular attention to the costs of operation. The cost of saving sight is necessarily high, but it has been the constant endeavor of this division to see that every dollar of expenditure is justified.

It is worthy of note that, while the law permits a maximum expenditure of \$375 per child, the actual cost of operation has been held to a much lower figure. This is evidenced by the financial statement, which is presented in Section VI.

The following items enter into the cost of operating a sight saving class. However, not all classes have every item.

Special teacher	Supplies—
Music teacher	Transportation—carfare, pupils, and guides—
Social worker	Fee for guides
Readers for high school chil- dren	Food—one hot dish for class
Supervision—Educational	Board—for out-of-town children
Medical (oculist fees for indigent children)	Permanent equipment— Special desks, artificial light- ing, etc.
Books—clear type	

## IV.

### SURVEY OF SIGHT SAVING CLASSES

In 1913 laws were enacted by the legislature authorizing boards of education to make application to the Director of Education for permission to establish schools for blind, deaf, and crippled persons. Classes for children with partial vision are required to have an average attendance of not less than eight.

The growth of these classes has been steady and has more than kept pace with state money available for this purpose.

The report of the state auditor shows there were 30 sight saving classes operating with state subsidy during the school year 1921-2.

During the past year there were 52 classes throughout the state.

They are located as follows:

Cities	No. Classes	No. Bldgs.	No. Pupils
Akron .....	I	I	15
Alliance .....	I	I	10
Ashtabula .....	I	I	12
Barberton .....	I	I	9
Campbell .....	I	I	11
Cincinnati .....	6	5	95
Cleveland .....	19	15	243
Cleveland Hts. ....	I	I	12
Columbus .....	2	2	22
Dayton .....	2	2	29
Hamilton .....	I	I	10
Lima .....	I	I	13
Lorain .....	I	I	17
Mansfield .....	I	I	14
Middletown .....	I	I	13

Norwalk .....	I	I	9
Oak Harbor .....	I	I	10
Portsmouth .....	I	I	14
Sandusky .....	I	I	13
Springfield .....	I	I	13
Toledo .....	3	3	45
Warren .....	I	I	13
Youngstown .....	3	3	42

NOTE: Since the time covered in this report, Canton opened a class and Toledo a fourth class.

Numerous surveys throughout the country seem to prove that the ratio of sight saving enrollment to the total school enrollment is about 1 to 500. In industrial centers this ratio will be higher.

The accompanying table shows the cities in Ohio maintaining sight saving classes and whether the enrollment in these classes reaches the normal expectancy.

City	School Population				Sight Saving Enrollment				Ratio	Shortage in Number of Pupils†
	Elem. Grades	Jr. H. S.	Sr. H. S.	Total	Elem. grades	Jr.H.S.	Sr.H.S.	Total		
Akron .....	31,096	.....	7,153	38,249	15	6	4	... 1	15	1-2500
Alliance .....	4,337	.....	1,164	5,501	...	...	...	10 12	10	1-500
*Ashtabula .....	3,216	.....	1,117	4,333	5	6	1	...	12	1-300
*Barberton .....	3,400	.....	750	4,150	8	1	...	9	...	1-400
*Campbell .....	2,686	654	260	3,600	10	1	...	11	...	1-300
Cincinnati .....	41,054	1,543	7,211	49,808	61	18	16	95	95	1-500
Cleveland .....	86,837	29,917	15,807	132,561	166	57	19	242	1500	0
Cleveland Heights.	4,012	1,465	1,050	6,527	12	...	...	12	...	1-500
Columbus .....	23,005	8,480	5,318	46,803	22	...	...	22	...	1-2000
Dayton .....	23,083	.....	5,322	28,405	25	2	...	27	...	1-1000
Hamilton .....	4,953	412	1,013	6,378	12	...	...	12	...	1-500
Lima .....	6,157	1,308	1,788	9,253	13	...	...	13	...	1-700
Lorain .....	5,208	1,866	1,268	8,342	8	9	...	17	...	1-400
Mansfield .....	4,190	.....	1,215	5,405	6	3	5	14	14	1-300
Middletown .....	4,228	370	970	5,568	9	2	2	13	13	1-400
*Norwalk .....	680	195	369	1,244	6	3	1	9	100	0
*Oak Harbor .....	296	.....	226	522	9	1	...	10	...	County Class

Portsmouth	7,774	1,096	8,870	13	...	13	1-600	4
*Sandusky	2,900	1,058	3,958	5	9	...	14	0
Springfield	7,558	2,467	11,552	13	...	13	1-200	7
Toledo	34,709	...	7,502	38	5	2	1-800	39
Warren	4,746	1,529	42,215	10	3	13	1-900	0
Youngstown	23,085	2,581	840	7,115	25	20	1-500	0
				4,021		1	1-600	13

\*Following the ratio of one sight saving pupil in every 500 of school population, it would take an enrollment of 4,000 to have enough candidates for a sight saving class in order to make a minimum class of eight. The cities marked with \* have a population under the 4,000 mark. This speaks well for the careful surveys which have evidently been made in these communities. These cities, in some cases, are taking care of children from the entire county.

†This column shows how far the sight saving class enrollment falls below the normal expectancy, as determined by applying the ratio of 1 to 500.

Based upon the minimum requirement of 8 pupils for a sight saving class, the application of the standard ratio of 1 to 500 also indicates that each of the following cities should have enough pupils for a class of this type:

East Cleveland  
East Liverpool  
Lakewood  
Marion  
Newark  
Steubenville  
Zanesville

## V. RURAL WORK

There are all over the state children with serious eye difficulties, living in communities too small to support a sight saving class. There are various ways of meeting this condition. The consolidated school could, in some instances, make the establishment of a class possible. This has not yet been developed in Ohio; or in any other state, so far as can be ascertained.

Children in communities near cities having such classes may attend them under the provisions of the Ohio law. This can be arranged either by daily transportation or by providing a boarding home.

The sight saving center, placed geographically so it can serve a county, has been developed and found practicable. It is rather expensive because of the cost of daily transportation, but is proving less expensive than it would be to send these children to the nearest city. It has the further advantage of permitting them to live at home.

An application of the standard ratio to county school enrollments is interesting. Since eight is the minimum for a class, it could not be expected that a county school system with less than 4,000 enrollment would have sufficient cases. However, 62 of Ohio's 88 counties have school enrollments of 4,000 or over. It is likely, however, that all the difficulties inherent in an attempt to set up one class for an entire county would not permit of considering any county whose enrollment was not sufficient to provide at least twelve candidates for a sight saving class. Of this number, perhaps the requisite eight could be obtained.

A study of the enrollment figures shows that twenty-eight counties have 6,000 or more pupils. One or more sight saving classes already exist in cities in twelve of these counties. The remaining sixteen counties in this list offer the most likely opportunities for the organization of county classes. However, since it seems to be established conclusively that special schools cannot be made to serve a very large district, there is no assurance that successful classes could be organized. A widely scattered population is a serious obstacle. The condition of the roads and the kinds of transportation facilities available are conditioning factors which may be detrimental.

The sixteen counties indicated above are: Athens, Belmont, Clermont, Columbiana, Darke, Guernsey, Jefferson, Lake, Lawrence, Licking, Perry, Miami, Tuscarawas, Muskingum, Wood and Wayne.

Although the Ohio law is adequate to provide for the education of visually handicapped children who live in small communities or in the country, it has proved to be of comparatively little value, because of parental objection to the child's being away from home. The opposition is found more often when the vision is such that the child can attend the regular class and make reasonable progress. The parents, in many instances, do not seem to recognize the cost of such procedure to already over-taxed eyes.

If a community is willing to sponsor a class, much cooperation is needed to get it started. Unless there is a good county nurse available the task is almost hopeless.

One of the difficult problems is to find the children. The State Department of Education, through its divi-

sion of child accounting, is endeavoring to obtain a more accurate enumeration of handicapped children. This will help to bring out the cases having the most serious loss of vision.

Even with a complete list available, there is still the big task of getting the proper refraction for each child. This is particularly true if the county has no ophthalmologist. The State Department of Health could greatly assist by organized clinics similar to those now provided for the examination of crippled children.

A child who is denied the privilege of attending a sight saving class may derive some benefit from the use of large type books. The teacher of such a child should make every effort to familiarize herself with the methods used in a special class. This does not, of course, approximate the value of attending a sight saving class; it is merely better than the possibility of having the child lessen his vision by the use of small type, or in other ways which can be avoided if a teacher has some knowledge of sight saving methods. Every teacher should have some understanding of correct lighting and seating conditions.

All health courses in normal schools should be so organized as to provide that some time shall be spent by the students in learning how to conserve the vision of the children who will be under their care.

A state provision for the examination of the eyes of all school children, if faithfully carried out, would solve the problem of finding the children who should be educated in a special class. Such examination would not only find the children, but in many cases the correction might be made early enough to avoid the possibility of the pupil needing the class later.

## VI.

### **FINANCIAL SUPPORT**

#### *Subsidy*

For the school year 1925-26 there was available, by direct appropriation of the general assembly, \$165,000 for the support of sight saving classes in the state. The subsidy is paid to the board of education maintaining a special class by the treasurer of the state upon order of the Director of Education.

The Ohio law makes adequate provision for a state subsidy to school districts which will cooperate; in fact, it is the most generous provision made by any state. This is, without question, the main reason for the general development of the work. This subsidy is determined as follows: the cost of educating a pupil enrolled in the regular classes is first computed. This per pupil cost is subtracted from the per pupil cost in the sight saving class maintained in the same school system. The state then grants funds sufficient to cover this excess cost for every sight saving pupil. There is a maximum limitation, however, which specifies that this state reimbursement must not exceed \$375 per child. Actual reimbursements are much less.

#### *Board*

In addition to the above subsidy, a board of education maintaining a special class may receive up to \$250 per year for boarding a child who is not resident in the district.

### *Tuition*

Tuition is paid by the board of education of the district in which the child resides to the district operating the special class. This sum is not subject to reimbursement.

### *Transportation*

The cost of transporting a child to a special class may be charged as a part of the excess cost of the class. Guides are paid from this fund also.

### **Per Capita Cost**

The average per capita reimbursement is \$209, based on enrollment. If the cost is figured on a basis of pupil years (a pupil year being the equivalent of one child in school every day), the excess cost will amount to \$264.

In order to ascertain the average total per capita cost, (which is the amount paid by the state plus the amount paid by the city), to these figures must be added the average normal cost of cities maintaining these classes. This amount is \$60.

Per capita costs vary greatly in cities operating classes. This is due to teaching cost, size of classes, transportation cost, number of required special activities and services, and overhead.

Cost of certain items such as equipment and supplies are almost standard.

The cost of conducting sight saving classes has decreased to a gratifying extent during the past three years. This is due to:

- (a) *Increased number of clear type texts available*

There has been a co-operative arrangement among the states having sight saving classes, whereby an agreement is reached on the titles to be printed. Instead of having a few copies of each of a variety of texts in the same subject, with a resulting exorbitant cost, enough copies are now printed of one particular text in a subject to supply all the classes.

(b) *Increased number of pupils per class*

One significant justification for this increase is the large number of textbooks made available on account of lower costs. This releases much of the teacher's time for other duties. Formerly much of her energy was taken by the tasks either of reading to the children from ordinary type textbooks or of writing out the material in larger type.

Teachers are better trained and more experienced. They gradually become able to properly care for a large number of pupils, up to a certain limit.

(c) *Increased supervision*

Increased supervision has been a decided factor in lessening the cost of classes to the state. Each supervisor is responsible to the state director of special classes for the budgets prepared for classes in her district. Many times her experience and knowledge of where and what to buy are the means of saving considerable sums to boards of education and, finally, the state. In many instances she can arrange for cities to buy supplies together, thereby getting a reduction in price.

## VII.

### SPECIAL STUDIES

#### I. A Study of the Diagnosis of Eye Conditions of Pupils in Ohio Sight Saving Classes

A study was made of the eye conditions of 631 pupils enrolled in the Ohio sight saving classes. The diagnosis given is the one reported by the examining oculist in each case.

It is hoped that this study may be a means of suggesting to interested persons the type of eye cases requiring placement in sight saving classes.

Ophthalmia neonatorum .....	9
Trachoma (old) .....	4
Corneal ulcers .....	4
Corneal opacities .....	11
Corneal scars rotary ocular nystagmus and mixed astigmatism .....	1
Corneal ulcers with hyperopia .....	1
Phlyctenular ulcers .....	1
Phlyctenular keratitis .....	2
Interstitial keratitis .....	53
Interstitial keratitis with secondary myopia.....	1
Keratitis following forceps delivery.....	1
Leucoma O. D. (Cataract O. S.).....	1
Macula .....	6
Iritis .....	2
Cyclitis .....	2
Uveitis .....	2
Congenital detachment of the retina.....	2
Cataracts—Congenital .....	50
Anterior polar .....	2
Posterior polar .....	2
Lamellar or zonular.....	1
Dislocation of the lens.....	2
Distortion of the lens with astigmatism.....	1
Lens and deposits.....	1

Deposits .....	I
Retinitis .....	2
Retinitis pigmentosa .....	4
Retinal changes and astigmatism.....	2
Congenital coloboma of retina in macular region.....	1
Retino-choroiditis .....	4
Coloboma of the retina.....	1
Choroiditis .....	17
Disseminated choroiditis and (optic atrophy).....	2
Central choroiditis .....	4
Syphilitic choroidoretinitis .....	6
Choroiditis (and optic atrophy).....	7
Choroiditis (and interstitial keratitis).....	1
Macular choroiditis (and optic atrophy).....	1
Albinism with myopia .....	2
Albinism .....	10
Intraocular and optic nerve changes with hyperopia.....	3
Optic atrophy and high astigmatism .....	2
Imperfect nerve development.....	2
Partial optic atrophy with nystagmus and hyperopic astigmatism .....	1
Optic atrophy .....	30
Injury of eye and myopia.....	1
Congenital malformation .....	1
Fundus underdeveloped .....	1
Sympathetic ophthalmia .....	1
Buphthalmos O. S. Hyperopia O. D.....	1
Accident .....	1
Atrophic globe .....	1
Congenital microphthalmos .....	1
Congenital amblyopia .....	10
Amblyopia ex-anopsia .....	2
Strabismus with compound hyperopic astigmatism.....	25
Convergent strabismus and hyperopia.....	11
Alternating strabismus with hyperopia.....	3
Strabismus and astigmatism.....	1
Strabismus and compound hyperopic astigmatism.....	2
Strabismus and congenital amblyopia.....	2
Convergent strabismus .....	5
Strabismus with nystagmus .....	2
Convergent squint with nystagmus.....	2
Myopic choroiditis .....	6
Hyperopia .....	32
Hyperopic astigmatism .....	47
Compound hyperopic astigmatism (with nystagmus).....	4
Myopia .....	68
Progressive myopia .....	29

Myopia (with nystagmus).....	5
Compound high myopia.....	1
Myopic astigmatism .....	35
Compound myopic astigmatism.....	22
Myopia (and stretched nerve head).....	1
Astigmatism, high .....	4
Astigmatism, mixed .....	10
Mixed astigmatism with nystagmus.....	3
Myopic astigmatism with strabismus.....	1
High myopia and choroiditis .....	1
Myopia (one eye) hyperopia (other eye).....	1
Hyperopia with nystagmus.....	2
Hysterical amblyopia .....	1
Nystagmus .....	12
Unknown .....	2

## II. Binet Testing in the Sight Saving Classes of Ohio

The test used in the sight saving classes is the regular Terman revision of the Binet tests, with a slightly easier grading of the vocabulary test. The list as revised by Porteus of the Vineland (N. J.) Training School is used and is found very satisfactory with the sight saving children. For the "finger readers," the Terman revision is followed closely but with some substitutions and transcriptions of the visual tests.

For the first few years that the sight saving classes were tested, all the children were retested once a year; now, however, it is found better to test them only once or perhaps twice, in order to establish their proper I.Q. without a doubt, then to test only the incoming children each year and the problem children.

In Cleveland, where it has been found very profitable to train the pre-school children, on the principle that blind or semi-sighted children have to have stimuli brought to them, whereas sighted children get their training largely from seeing things and people, tests have been made of these infants every year, to note

their mental growth, see wherein they are lacking and try to supply that in their training.

Each applicant for the sight saving class must have an I.Q. above 70%. The divisions of mentality according to I.Q. are as follows:

Below 70%	Feebleminded
70%-80%	Borderline
80%-90%	Dull
90%-110%	Normal
110%-120%	Superior
120%-140%	Very superior
Above 140%	Near genius or genius

The approximate percentages of last year's testing are:

Percent Superior	12.8
" Normal	58.6
" Dull	25.4
" Borderline	3.2

### III. Spelling Ability of Sight Saving Pupils

During March, April and May, 1926, a spelling test was given to the pupils in the 37 sight saving classes of northern Ohio. The Morrison McCall spelling scale was used. The spelling achievement of sight saving pupils in these classes compares with the norms obtained from testing thousands of pupils of the same grade as follows:

Grade	2	3	4	5	6	7	8	9
Number tested...	34	41	54	51	59	56	32	11
Average number of words correct in regular grades.	11	18	24	30	35	39	42	44
Average number of words correct in sight saving classes .....	9.8	17.9	23.4	29	34.1	36.9	40.4	42.3

COMPARISON OF 1925 AND 1926 SPELLING ACHIEVEMENT OF SIGHT SAVING PUPILS

<i>Grade</i>	2	3	4	5	6	7	8	9
Number tested—								
1925.....	29	37	42	30	58	37	25	5
1926.....	34	41	54	51	59	56	32	11
Average number of words correct in regular grades.	11	18	24	30	35	39	42	44
Average number of words correct in sight saving class —	1925..	8.1	16.5	24.6	29.5	32.2	36.0	39.1
	1926..	9.8	17.9	23.4	29.0	34.1	36.9	40.4
								42.3

Many sight saving teachers have thought that pupils with impaired vision ranked very low in spelling achievement. In the spring of 1926, list 1 of the Morrison McCall spelling scale was given to the pupils in sight saving classes in northern Ohio. This test proved that the spelling ability of these pupils did not compare unfavorably with the spelling ability of pupils in the regular grade rooms. In the spring of 1926, list 2 of the same scale was used. The results showed some improvement over the 1925 test. The rather low average for second grade is believed to be due to the very small amount of writing done by pupils of that grade.

A study of pupils with high spelling brightness (60 and over) was made, also a study of pupils with very low spelling brightness (30 and below). A comparison of spelling brightness with the intelligence quotient of each individual on the list seemed to show that while pupils with high intelligence quotients may be poor spellers, pupils with low intelligence quotients are not good spellers. A comparison of the spelling brightness of these individuals with the amount of vision seemed to show that the amount of vision had little in-

fluence on the spelling brightness. Some pupils with very little sight had a very high spelling brightness, while on the contrary some pupils with poor spelling brightness had a fair amount of sight as compared with many pupils in sight saving classes.

The recommendations based upon the results of this test are:

- A. Pupils should be given special spelling lists made up from words used in geography, history, language, physiology, etc., to compensate in part for the small number of times these pupils see the words.
- B. Teachers should place greater emphasis on spelling. They should stress concentration and observation on the part of pupils when they first see an unfamiliar word.
- C. Special spelling lessons should be given pupils in junior high school classes. Spelling is not on the schedule of many of the seventh, eighth, and ninth grades for regular classroom work, but a study of the spelling brightness of many pupils shows that the spelling brightness drops many points after spelling lessons are discontinued.

#### **IV. Graph Showing Grading of Ohio Sight Saving Pupils by Chronological Age**

Figures inside black lines indicate number of pupils  
of normal age for the different grades.

Figures to the right of the black lines indicate number of pupils over age.

Figures to the left of the black lines indicate number of pupils under age.

This graph covers the second semester, 1926. Ages are figured as ages nearest to June.

## SUMMARY

Percentage under normal age.....	3.0
Percentage normal age.....	54.7
Percentage one year over normal age.....	22.2
Percentage two years over normal age.....	12.1
Percentage three years over normal age.....	5.4
Percentage four years over normal age.....	1.4
Percentage five years over normal age.....	0.7

This classification of pupils by grades indicates that 41.8% of the pupils enrolled in sight saving classes are chronologically over age for the grades in which they are enrolled.

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Promotion statistics of June, 1926, enrollment based upon records of Ohio sight saving class pupils since their entrance in sight saving classes.

7.7% of the pupils exceeded the normal rate of promotions  
16.8% of the pupils failed to make the normal rate of promotions  
75.5% of the pupils made the normal rate of promotions

The pupils enrolled in these classes made 2148 out of 2229 possible semester promotions.

The percentage of possible promotions made after these pupils entered sight saving classes was 96.3%.

SUMMARY: This study indicates that while many sight saving pupils are over age for the grade in which they are enrolled the most of the retardation occurs before their entrance in sight saving classes. The instruction of these pupils, while caring for their visual disability, makes it possible for them to make the high promotion record of 96.3%.

NOTE: These statistics are based on the records of 513 pupils.

## V. Graph Showing Grading of Cleveland Pupils by Chronological Age

Figures inside black lines indicate number of pupils of normal age for the different grades.

Figures to the right of the black lines indicate number of pupils over age.

Figures to the left of the black lines indicate number of pupils under age.

The graph covers the second semester. Ages are figured as ages nearest to June.

### Sight Saving Classes, 1925-1926

## SUMMARY

Percentage under normal age.....	3.5
Percentage normal age.....	60.7
Percentage one year over normal age.....	28.0
Percentage two years over normal age.....	7.4
Percentage three years over normal age.....	1.9

A comparison of classification by grades of sight saving pupils second semester, 1923, and second semester, 1926, reveals the following:

	1923	1926
Percentage under normal age.....	1.9	3.5
Percentage normal age.....	46.7	60.7
Percentage one year over normal age.....	28.8	28.0
Percentage two years over normal age.....	13.4	7.4
Percentage three years over normal age.....	8.3	1.9
Percentage four years over normal age.....	0.0	0.0
Percentage five years over normal age.....	0.6	0.0

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Promotion statistics of June, 1926, enrollment based upon records of all the pupils since their entrance in the Cleveland sight saving classes are as follows:

20 pupils exceeded the normal rate of promotions  
32 pupils failed to make the normal rate of promotions  
153 pupils made the normal rate of promotions.

The pupils enrolled in these classes made 1064 out of 1087 possible promotions since entering sight saving classes.

The percentage of possible promotions made after these pupils entered the sight saving classes was 97.9%.

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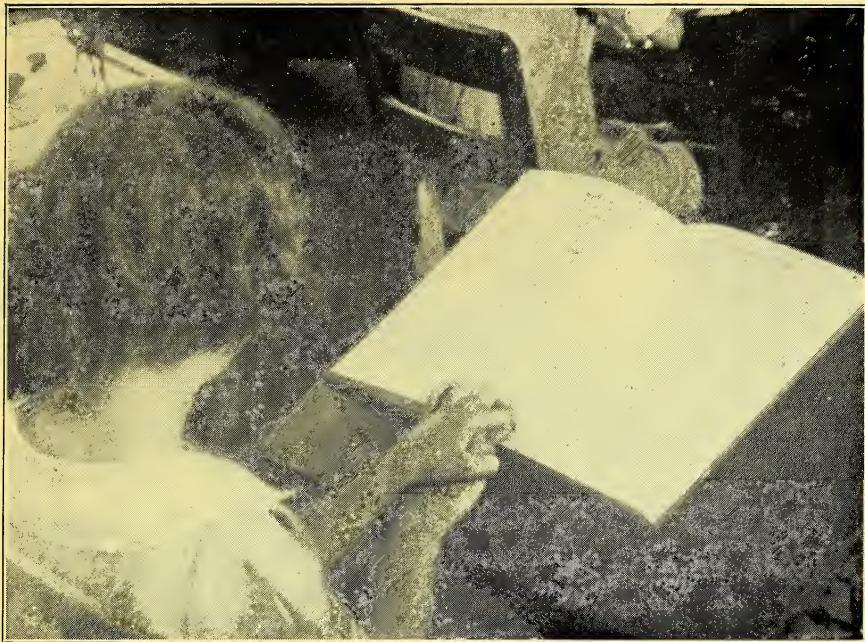
Comparison of promotion records, Cleveland sight saving classes, shows distinct improvement in the past three years.

Percentage of promotions made after pupils were enrolled in sight saving classes:

1923	1926
93.7	97.9

Comparison of promotion rates in Cleveland sight saving classes:

	1923	1926
Percentage of pupils making normal rate of promotion .....	60%	74%
Percentage of pupils exceeding the normal rate of promotion .....	15%	9%
Percentage of pupils failing to make the normal rate of promotion .....	25%	15%



Sight saving class pupil reading large type book



A guide brings these two children to the class



## VIII.

### SIGHT SAVING CLASS REPORTS

#### **Akron**

In the fall of 1924 the first sight saving class for Akron was started. A very pleasant, large room with four northern windows had been selected in Bowen School, the most centrally located of the public schools.

The idea of a class for children with defective vision was so new to Akron families that the problem of organization was a slow one. Practically all of that first September was spent in selling the idea to the community. Visits to other schools, to principals, to nurses' meetings, and many to homes were made before a group of eleven children, who needed the special help badly, was finally assembled.

The Lions' Club helped to subsidize the new class which started in the autumn of 1924. They furnished a generous fund for glasses or other supplies than those furnished by the city and state. The individual members of the Club made visits to homes helping to explain the object of the new class and lent their cars to help make the necessary surveys. Ever since the class first started the members have tendered many kindnesses to the children.

One of the first things done was to make the somewhat bare room more attractive with ferns, flowers, and colorful posters. The clock and all pictures were lowered to eye level and a definite rule established that no object should be shown in the sight saving room that was not clearly visible to the children.

Besides the regular school work of the grades, craft work has been taught for occupational work. Many posters have been made and the class printed a newspaper which has been called the Lions' Cub in honor of their benefactors.

Many visitors have come to the sight saving room, especially during the first year—townspeople—nurses—medical people—even classes of psychology and sociology from the Akron University. The class was written up by local newspapers.

With two exceptions the subject matter taught has been identical with that of the course of study for the regular student. Manuscript writing has been tried and some really beautiful writing has been accomplished. The clear cut letters as well as the spacing seem to make this type of writing peculiarly good for children with low vision. It was made optional with the class and most of the upper grade pupils prefer it to the familiar script. Touch typewriting has been taught to upper grade students.

But the greatest departure from the beaten path is the weekly class in Eye Hygiene in which each pupil is taught his own eye limitations and a foundation laid for successful vocational guidance which should, later, lead to economic independence.

A marked improvement has been shown in all the school work and a 99 per cent promotion record established. This is notable, as the first class averaged four non-promotions per pupil, including as it did one case of a boy having a record of twelve non-promotions—an exceptional case, of course.

The improvement in school work, noticeable as it is, is not comparable with the psychological effect upon

pupils of this type when they are placed in an environment which makes accomplishment possible for them. They seem so much happier, brighter, more confident of their abilities. Even the physical appearance of several seems improved,—more alert expression and more care to their personal appearance.

An attempt has been made throughout the school to give these children some little prominence in the school organization. This has helped several apparently uninterested ones to a better school spirit.

At the close of the second year the room is found well equipped; with a library of clear type books, a large typewriter, colorful curtains and pictures.

The work is well started with a full class enrollment and a waiting list which will before long justify a second class. One of the girls has gone to high school where she is making a really fine average.

### **Alliance**

A sight saving class was opened in Alliance, Ohio, in January, 1917. There were seven children in the first class.

The class is now nine and one-half years old and the charter members have all disappeared. During this time twenty-two different children have been enrolled, twelve boys and ten girls.

Three of the children have finished the eighth grade during this time and attended high school for a while. Two others have now completed the elementary grades and expect to attend high school. A number of children have been permitted to return to their regular grades because of improved eye conditions.

The Lions' Club has been interested in the class

and has remembered the children at Christmas time and also taken some of them on camping trips.

### **Ashtabula**

The sight saving class of Ashtabula was organized January 8, 1916, with Miss Olive Peck, who is now one of the State Supervisors of Sight Saving Work, as the first teacher. The room chosen in the Division Street building is attractive in location, lighting and surroundings.

There were at first eight pupils. These were composed of cases gathered in by the school nurse. After the cases had been found, and examined, and the recommendation made by the doctor that they be entered into the class, several visits were made by the nurse and teacher to secure the consent and cooperation of the parents. In many cases this was done with great difficulty.

Of the twenty-three entries into this class five have quit, three moved out of town, two returned to the regular grades, and one has graduated. One boy who entered fourth grade when this class was formed was graduated with full credit with the class of 1925. Three who entered the class in first grade enter the first year of high school next year. One of the original class is a junior. Of those who left, one finished eighth, three went to work, two of these being juniors in high school, and one much retarded pupil quit when past the age of compulsory attendance. Three moved away from Ashtabula. One entered high school in the Florida town to which she moved, one, a junior, did not return to school, and the third was an orphanage case. Two pupils returned to the regular grade.

At the present time there are twelve pupils, four in high school, three in junior high, five in the grades. The pupils are making steady and normal gains in weight and some of them are making steady improvement in their eye troubles.

The class room is very fortunately located, near the center of town, convenient to transportation facilities and other schools. The building contains the first six grades, is next door to the high school, and about two minutes' walk from junior high school. During the winter months the children have their lunches at the high school lunch room.

### **Barberton**

A sight saving class was organized in Barberton, Ohio, in February, 1926, with an enrollment of ten, representing five grades.

This class is too new to be able to report definite results, but gives every indication of supplying a real community need.

Barberton is an industrial center, and has a high per cent of foreign population. This may be one reason for the large number of children who should be educated in a sight saving class. The ratio of one child in every 500 of the school population has already been met, as our ratio now stands one in every four hundred.

Community cooperation has been good.

### **Campbell**

A sight saving class presents a different problem in every city. Campbell has a class located in the heart of a steel mill district. The teacher has taught nine years in this district and is now teaching the third American child during that period.

She is well fitted for the work, as she is both a teacher and social worker and understands the needs of the community. The fact that she has the confidence of all the people in the district is of greatest value.

The class has made good progress since it opened in October, 1925. It has never enrolled a large number of children, but has always had five and, at one time, six divisions represented.

### Cincinnati

In 1905 Misses Florence and George Trader organized in connection with the Cincinnati Public Schools the first day school for the blind in Ohio, the second class of this type to be opened in the United States. In 1914, Mr. Robert Irwin reorganized the work and opened a sight saving class.

From this beginning, the work has gradually grown in scope so as to include with the Braille and sight saving classes, general conservation of vision throughout the public schools. Originally these activities were carried on under the head of "School for the Blind" with a "Principal" in charge. In the fall of 1926 this title was changed to "Department for Sight Saving" and the executive was given the name "Director". This is significant of the broadening field and change in status, which has taken place in the past ten years.

This department for sight saving has for its aim, not only the care of children with defective vision but in so far as possible the conservation of vision among those who have normal sight. The immediate agency for carrying this on has been a group of teachers, one from each public school building in the city, which meets several times a year to further the cooperation between medical and educational interests in sight saving.

There originated in this group the idea of relighting some of the older school buildings so as to give all children the right lighting conditions under which to use their eyes. These teachers have been of great assistance to the nurses and doctors in caring for the routine eye cases, seeing that glasses are worn when prescribed, and that they are kept straight and clean. It is hoped in this way that sight saving will have a definite meaning for every public school child in Cincinnati.

For admission to the sight saving classes each child must have a complete eye examination to discover pathologic conditions as well as refractive errors. The pupil must also have a mental test. A good many of the children needing this type of work are found by the school doctors who have charge of the medical inspection work in the schools and are under the direction of the Board of Health. Other cases come to our attention through the interest of teachers and social workers. After admission to a sight saving class a yearly examination of the eyes is made by the oculist or clinic which originally sent the child in.

The 95 children in the Cincinnati classes (elementary and high) on the 1 to 500 basis is equivalent to a school enrollment of 47,500. This would seem to mean that with about 100 pupils enrolled the field would be covered.

### **Cleveland**

Sight saving classes were opened in Cleveland, the second city in this country to establish them, in the fall of 1913 under the supervision of Mr. Robert B. Irwin. From that year, when they were but a small division of the Department for the Blind, they have shown a yearly increase both in actual numbers and in the ratio of sight saving pupils to the total school enrollment.

There are several factors in this growth which are more significant than the mere numerical increase. By consistently bringing to the attention of oculists, nurses, teachers and parents the purposes of the sight saving classes, the city as a whole has been aroused to their value and has become more desirous of referring pupils to them. The medical inspection in the school system is now finding practically all of the pupils who need this specialized educational opportunity. Furthermore, the annual statistics show that in the past five years a larger number of pupils has been enrolled in sight saving classes in the first three grades. Formerly pupils with poor eyesight went as far as they could in the regular classes, acquiring a series of faulty habits and general laxity in school life. As a final resort they were referred to sight saving classes. By advocating the plausibility of transferring younger children before they have failed, become behavior problems, or been subjected to serious eye strain, the classes have been able to give them the proper start and the results unmistakably prove the value of special work early in their school careers.

For several years past, pre-school work similar to that carried on in the homes of blind children has been extended by visiting teachers to the homes of children with lesser eye defects. These home visits have the advantage of bringing the importance of proper home training to the parents, and the means of accomplishing it. The children then have a better opportunity of developing normally and of being prepared to enter kindergarten and the first grade sight saving class at the proper age. The educational opportunity therein presented insures normal progress through the grades, other things being equal, in spite of the lack of normal

vision. The system is spared these pupils as failures and repeaters.

Cleveland has three visiting teachers, among whom a considerable number of duties are divided. The enrolling of new children in sight saving classes often entails selling the idea to the parents before they will consent to the transfer. Guides must be obtained to take the small children. The visiting teacher makes contacts with the oculists of the city, calls at the homes of the pupils, and at school. She helps the parents to an understanding of sight saving methods and the reasons for them. She urges cooperation from them in order that sight saving methods may be carried out in the daily home life of the child. She plans with the parents and teachers for the pupil's future and, when necessary, helps him make the proper social adjustment in his community. When the pupil enters high school she guides him in the selection of his studies. When he goes to work she helps him to select the type of work which he desires and for which he shows an aptitude, but which will not be injurious to his sight. It is sometimes necessary for the visiting teacher to effect the actual placement. In all cases she keeps in touch with the younger worker until assured that he will be able to make a satisfactory vocational adjustment under suitable working conditions.

From their inception the classes in Cleveland have provided music and handwork as special subjects in sight saving classes. These subjects are taught to pupils with due regard to the eye condition of each individual child. Pupils whose sight must be used as little as possible have rote singing, music appreciation, rhythm classes, which give excellent training for bodily poise and bodily relaxation, and ensemble work with simple

instruments, many of which may be made by the pupils in the primary class work. For pupils whose eyes are not in so serious a condition, but whose sight limits them in competing socially, such work as piano lessons and band instrument lessons are valuable, not only from the professional but from the social point of view. Even if the pupil is not very talented there may be some instruments, such as the drum, the bones, or accordion, which he can learn to play so well that his place in his home community will be established and he will no longer be a looker-on, but a participant, and perhaps the entertainer of the group. In this way music may lead to safe and worthwhile uses of leisure time, and in some cases to professional opportunities.

We know that it is natural for many children to read. No sight saving class can keep a pupil from this in his leisure time, unless it offers interesting substitutes, and follows up the application of these by home visits from teachers and visiting teachers.

Handwork is taught not only because of the importance of developing manual skill, muscular coordination, and for other similar objectives, but also to provide the child with the knowledge of how to make simple, useful and attractive objects in his leisure time. These may be sold or used as gifts; but their principal value from oculists', parents' and teachers' point of view is to occupy the child in a manner not harmful to his eyesight, and at the same time to fulfill his normal desire to make things. Incidentally he may learn to market his goods and to gain ideas of buying and selling materials.

The aims and procedure of conducting these classes beyond what has been described are in general similar to the original Cleveland plan described herein under the caption "The Ohio Plan".

DIVISION FOR SIGHT SAVING AND BLIND  
 CLEVELAND  
 1925-26

Number of classes.....	19	
Elementary .....	15	
Junior High .....	4	
Number of buildings.....	15	
Enrollment —		
September .....	230	
June .....	239	
Lowest enrollment .....	226	
Highest enrollment.....	245	
Percent of myopes.....	38	
Number of regular schoolroom teachers.....	22	
Number of full time special teachers.....	9	
Number of part time special teachers.....	2	

**Cleveland Heights**

In every community there comes a time when a need for developing a new field is clearly visualized. No doubt it has been little thought of by some, but there is always sure to be a person or group of persons, who can look far enough ahead to regard the need greatly worth the time and effort required in the construction of such a new venture.

In this community of Cleveland Heights where schools are among the most modern as to style, methods, in fact all things pertaining to education,—it would seem that there could be nothing lacking to further the needs of the child. All was very well for the average child, but so far no one had given much thought to the child who was struggling to appreciate his school, his studies and activities in general, but with no avail, for he seemed constantly to be falling behind. This was the child with defective eyesight.

Upon completing the physical examination of the children, the school nurse in a certain building discov-

ered several pupils whose eye conditions made their school work not only a burden, but something that should be greatly lessened or curtailed entirely. The report of this discovery gradually resulted in the finding of other children from other buildings, who were to belong in this same group.

Then came the question of a "Sight Conservation Class" for this community, having it as centrally located as possible. So with the cooperation of the nurse, the principals, parents, and the Board of Education, a class was organized, transportation arranged for, and equipment ready to open October 12, 1925.

The class consisted of ten children representing five divisions and it now has an enrollment of fourteen representing seven divisions.

In the spring, a letter of appreciation, signed by the parents of pupils in the class, was sent to those responsible for its organization.

### **Columbus**

November, 1924, marked the opening of the first sight saving class in Columbus at Hubbard Avenue School Building in the north end of the city. Owing to a large building program it had been necessary to delay somewhat the opening of this first class. Its need was soon evidenced when there were enrolled twelve children in seven divisions. At the end of the year one child was able to return to his grade, due to improved eye condition.

March 1, 1926, a second center was opened in the Main Street building, which is in the eastern part of the city. This center has also rapidly filled.

It is the intention to open another center in the

southeastern section as soon as there is a room available.

Many good results have come from numerous home visits made by both the teachers of the sight saving classes — not only for the pupils enrolled, but for children in the grades.

### **Dayton**

In the autumn of 1922, the first sight saving class was opened in Dayton. The preceding summer the teacher who was to have charge of the class attended Columbia University, taking the course in sight conservation.

The new movement was met with greatest courtesy and interest, both by the oculists and the city department of health under whose direction the school nurses worked. By consulting nurses and various available records it was found that fifteen children were eligible for the class. A room conforming to the state requirements was selected in the new addition to the Patterson School. Before the year ended it was necessary to give the teacher an assistant.

The next fall a second class was opened at the Irving School with the assistant in charge, she also having had special training at Columbia. The second class room was also in a new addition and well located.

At present there are fifteen children in the Patterson class and ten at Irving. The children in the Patterson class are in the sixth, seventh, and eighth grades, while the children in the lower grades attend at Irving. There are two girls in junior high schools who have readers.

**Hamilton**

A number of interesting facts have developed as a result of the opening of a sight saving class in October, 1924,—many more children have benefited than the ten who are enrolled. The school nurse and teacher of the sight saving class have planned to visit in the homes of all children with vision of 20/40 or less. If the parents are unable to purchase glasses they will endeavor to send them through the school clinic— and this has already been done in some cases.

Particular attention is paid to the children with defective vision in the lower grades, hoping to get for them thus early every benefit possible. Many times it has been found possible to give them normal vision with glasses.

Up to the present time forty home visits have been made.

One fourth grade boy came into the special class as a second grade pupil and in a semester and a half was doing fourth grade work.

As other rooms in the school system have been re-decorated, the same colors have been used as are approved for the sight saving class.

**Lima**

Because there were a number of children in the regular grades who were having difficulty in making proper progress, the board of education decided to open a sight saving class at the beginning of the school year 1925-26.

The class was soon filled and the children enjoyed working under the new conditions. Again and again they expressed pleasure at their ability to see the work

on the blackboard, and their clear type books have been a constant source of pleasure.

There are now thirteen children enrolled in five grades. The teacher has had many invitations to speak to various interested groups. In this and other ways the people of Lima have showed their interest in the class.

### **Lorain**

A Sight Saving Class was organized in Lowell School October 30, 1917, with an enrollment of eight pupils.

As the enrollment increased it was possible to divide the class into two distinct groups, one elementary now in Lincoln School, the other a junior high group in Whittier School. This was done February 1, 1926.

Although the growth in numbers has not been astounding, the individual needs of these children who have defective vision have been adequately met. This has been made possible by the Lorain school medical department.

Several pupils have been returned to regular grade work with the normally sighted children.

With the present interest, many new cases are being discovered which in time will necessitate the forming of other new classes.

### **Mansfield**

The Mansfield Sight Saving Class was established in September, 1916, with two classes and an enrollment of eighteen. These two classes served the partially sighted pupils of the Mansfield public schools for several years until the number of pupils became too few to warrant the continuation of two classes, so one was

abandoned. Since that time one class has been continued with an average enrollment of eleven pupils.

For several years only pupils from the Mansfield City schools were enrolled, but four years ago a pupil from a neighboring village was admitted to the class. This pupil was boarded in Mansfield for two years. At the end of that time a bus line was established, making daily transportation possible.

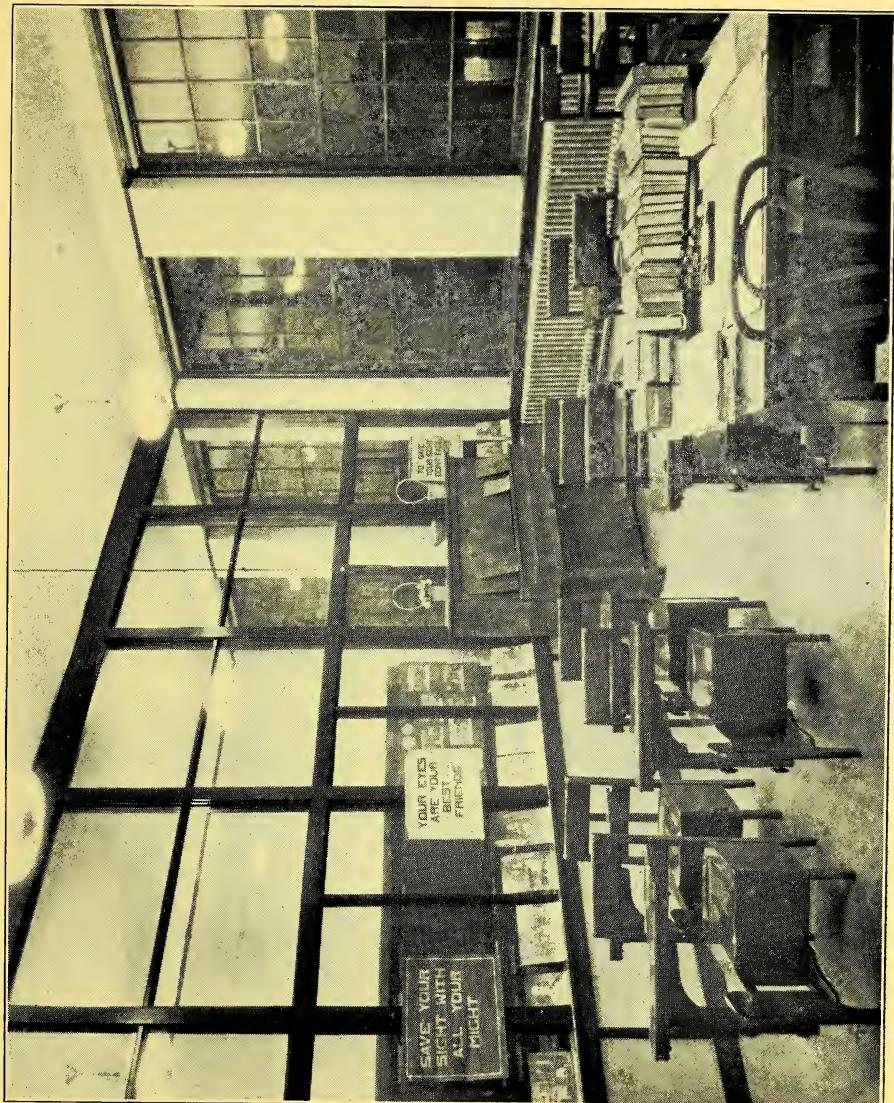
This year four children from the county schools were enrolled in the class. Three of them come from the same family. They come to school each morning and go home each evening on the interurban car. The other boy lives about two miles from the school and walks that distance each day.

At present there are thirteen children in the sight saving department. Five of these are enrolled in high school. They are doing well in their high school work. One boy who is in 11B is a member of the Honor M Society. Membership in this society is based on average grades of A's and B's. Two other sight saving class boys in 9B are in line for membership.

The high school pupils prepare their work by using sight saving class material and by listening to the readers, who read their lessons to them.

In the elementary grades there are eight children, ranging from grade 2B to 8B. It is interesting to watch their development and improvement. In almost every case within the last two years there has been a great change in each pupil who has entered the class. Where he was timid, he has gained self-confidence; where he has been irritable and nervous, he has overcome his nervousness and has become friendly and happy.

It certainly is an advantage for both teacher and pupil to be able to become so closely associated with each



Sight saving class room where glass partition was used in order to conserve all the day light



other. A part of the success of a sight saving class can be attributed to this fact.

### Middletown

The sight saving class in Middletown was opened September, 1923, with ten pupils. Since that time there have been as many as sixteen enrolled, consisting of six grades, and high school boys with readers. At present there is a class of thirteen pupils, eleven in elementary grades, one junior high pupil, and one senior high pupil with a reader. The junior high pupil takes typing and spelling in the sight saving class. The high school pupil reports to the sight saving teacher at regular intervals for a check-up on grades, eye condition, etc. During the past three years twenty-two children have been enrolled in the sight saving class. Some have moved out of the city and been enrolled in other sight saving classes, while two have been returned to the regular grades, due to improved eye conditions.

Last year a seventh grade boy entered the class with a record of grades averaging about 85. He has a high degree of myopia (an eye disease tending to become worse). He made the unusual record of being a straight A pupil in all subjects throughout the whole year. This was achieved without eye-strain, as evidenced by the fact that his oculist was pleased with his eye condition at the end of the year.

Many examples could be given of improved school work, "bad" (?) boys made into good boys, improved physical conditions as well as improved eye conditions.

As a result of the work accomplished in this class, teachers in the school system are becoming more and more eye conscious.

**Norwalk**

Eight years ago, a Norwalk physician, who is the president of the school board, had "the vision" of a Norwalk sight saving class. With the cooperation of the superintendent of schools and the school nurse, the class was founded.

An ideal location was secured in the Benedict school building. This was a new, well lighted building, and in every way fitted for a sight saving class.

It may be interesting to note that the class has had three teachers. The first left the Norwalk class to introduce sight saving work in the State of California.

In the past eight years, twenty-three different pupils have been enrolled. The school has never had a large enrollment, the greatest number of pupils having been enrolled at one time being eleven. The academic standards in this class have been unusually high. There has been in attendance at various times a number of children from the county. The class has, therefore, served not only Norwalk, but the surrounding districts.

**Ottawa County**

It may be well to describe somewhat in detail one county class which has been established, and which meets a real need, in Ottawa County, Ohio.

In 1923, the Ottawa County nurse, while examining the children of the schools, found one little child with very poor vision who, if left in the regular school, would have lost her sight entirely. The nurse immediately reported the matter to the child's parents and tried to persuade them to send her to the Toledo Sight Saving Class. The parents asked that a class be established at

home, which was taken under consideration at that time. They finally decided to send the child to one of the Toledo classes.

During the school year 1924-25, the children of the county were inspected by the nurse and enough defective vision was found to warrant a visit from Dr. Toots of the State Commission for the Blind, who was responsible for more complete examinations. His work was done at clinics held at Oak Harbor and Port Clinton, the county seat. The result was that enough children were found eligible for a sight saving class to warrant asking for one for the county.

The next problem was to find a suitable location for the class. It was finally decided to establish it at Oak Harbor, a town of two thousand population, in preference to placing it in Port Clinton, the county seat, which has twice as large a population, because geographically and from the transportation standpoint, Oak Harbor is more nearly the center of the county. Other conditions were also taken into consideration.

1. Oak Harbor schools are a part of the county school system, while Port Clinton is a special district. Since the majority of the children to be served were from the county, it seemed wise to keep the school under county jurisdiction.
2. The majority of the children lived in the Oak Harbor district or near it.
3. The Oak Harbor grades are housed in one building, while the Port Clinton grades are housed in three buildings.
4. The Oak Harbor Board of Education was extremely anxious to have the class. When it was found that there was no room available, the superintendent of schools offered his office.

It is interesting to note that the children in the class are the product of American population and not of foreign or industrial conditions.

The class has ten children in seven grades.

### **Portsmouth**

The sight saving class in Portsmouth was opened on October 26, 1925. Six children reported, representing five different grades. The enrollment was soon increased, however, to thirteen pupils and five grades.

The class is so new that none of the children have yet made up a grade. However, there are two cases who were failing in the regular grades who, since entering the special class, have improved so much in their work that they have been promoted every semester.

These two cases have been designated because there is a greater improvement in their work than in that of some of the others. However, all of the children have made progress in their studies.

### **Sandusky**

The Sandusky sight saving class has been very satisfactory in every way. The oculists have been interested and have helped give the class the good reputation it has in the city.

The class is unusual in the number of divisions represented (this has been true almost from the beginning), but in spite of this the children have done very acceptable work and a number of them have improved in vision.

Handwork is always a special pleasure, and the pupils have not only bought their own materials, but

have earned a nice sum of money for their class projects, selling various small articles they have made.

The class opened September 1, 1922. It has been most fortunate in having the cooperation of all the oculists, nurses, and any others whose services are vital to the success of a class of this type.

### **Springfield**

Bushnell school is fortunate in having a special class for children with defective vision as well as one for deaf and one for crippled children.

The sight saving class was opened during the school year 1924-25. It was fortunate in having the support of the health department and of private oculists.

Before the close of the year fourteen children were enrolled, thirteen boys and one girl. In this group were children in each of the first six grades. There is now a waiting list for a second class.

The pupils' eyes were examined twice during the year. Three were found to be greatly improved, one was able to return to his regular class and three, whose eyes were growing steadily worse, were so helped that the progress of decreasing vision was arrested.

In spite of his handicap, each child kept up with the regular class and was promoted at the end of the year. Two of the boys will enter junior high next fall.

### **Toledo**

Toledo opened its first sight saving class in November, 1915. Prior to this a few children with defective vision were accepted in the class for the blind at Jefferson School. But in 1915 these sighted children were transferred to Cherry School. Eight or nine children

formed that first class. While the building was new, the lighting correct, and everything provided as well as could be, still this pioneer class would have seemed handicapped, if compared to one with our present supply of large type books. There were few books available, and many problems to work out. However, the class prospered and its value was appreciated.

Cherry was a growing district and not centrally located, so in 1917, for these two reasons, the class was moved to Central building, now called Woodward. The enrollment grew until there were too many children for one class, so a second was organized and given an adjoining room. These classes were later reorganized as one class and moved to Navarre School, where it is still located.

Most of the children who were in these early classes graduated from the sight saving class. They profited by the increasing supply of large type books and the other aids of a special class.

The next class opened at Lincoln School. Sight saving work was new to patrons of the Lincoln district. Education of the parents was one of the first moves toward publicity. Many visitors were taken into the sight saving room, where they were shown the splendid equipment and could easily see the advantages of this type of school. The principals of elementary schools in the city were notified to make application if any of their pupils were in need of help of this kind. Pamphlets were sent to oculists in order to explain the work of the school. Their attention was called to the requirements for entrance into sight saving classes. Articles were put into the newspapers so that the public might become acquainted with the work.

At the close of the first year all children were given a second eye examination. Three children were sufficiently improved to return to regular classes. It was found that one boy had accomplished the work of two years, and that two children who had been repeating a grade had been returned to the grade in which they normally belonged. The first year saw the work established at Lincoln School. Since this time it has never been necessary to hunt up recruits. More than a sufficient number of applicants to keep the class filled is usually on hand. The class has numbered twelve and sometimes sixteen pupils. Frequently children have been returned to their regular grades because of improved eye conditions. Excellent equipment has been added from time to time so that more efficient work can be done. There are three graduates of the Lincoln sight saving class in high school. They are doing exceptional work.

A sight saving class was organized in La Grange School in September, 1924. The children, some of them in particular, did not at first wish to be in the class, probably because they felt themselves set apart. However, that attitude is changed and they show a real appreciation of the privileges and advantages of the sight saving class. They are learning their own responsibility in the matter of eye conservation and are realizing that they, as individuals, benefit or lose by the care they take, or do not take, of their eyes.

### **Warren**

Roosevelt School houses the sight saving class at Warren, which was established in January, 1925. There were eight children of various ages enrolled in grades from one to six. This number has varied considerably since that time, although never totaling over twelve.

The children have kept in line with their own classes in commendable fashion.

They are encouraged to bring fresh fruits for their lunch. The hot dish is considered necessary for the proper strengthening of the body which will in turn help to make stronger eyes. When lunch is over the girls take turns at washing the dishes and leaving everything in perfect order for the next day. Often the boys have successfully taken a hand at the dishwashing.

We have had many red letter days during the time the class has been established; and a great many of these have been supplied through the generosity and kindness of the Lions' Club of Warren which has sponsored the class since its beginning. This club has done much to awaken interest in the class since it made its start as a new project. The interest and enthusiasm of its members has been a great encouragement to the children.

### **Youngstown**

Sight saving classes at Monroe School have proved their worth both to the pupils benefited and to the entire student body.

The first class was organized November 7, 1921. The pupils came from various parts of the city and county and were carefully selected. The work of this first class won such approval that a second center became imperative. The fact that these pupils were so able to compete in class room, and often to excel, influenced more parents to request the privilege for their children. A second class was started April 16, 1923, in the same building.

In September, 1924, a third class was opened at Adams school. This class had an enrollment of fourteen. Eight of these were within walking distance of

the school. A few have been transferred for various reasons; but the number remains about the same, as vacancies are quickly filled by bringing in the most needy on the waiting list. The oculist has dismissed two pupils from this class who are now doing regular work without eye strain.

For the first few months the attendance was very irregular, but by close observation and numerous home calls, it was found that this was mainly due to lack of medical attention and home conditions in general. Confidential talks with each individual child about his own particular physical problems, and heart-to-heart conferences with mothers quickly brought their reward.

The boys and girls were soon coming to school and, instead of boasting of how late they had been out the night before, were telling how many hours they had slept.

The school nurse carefully examined each child and great effort was made to have all as nearly normal as possible. Some warm, nutritious food was served each noon with the lunch brought from home and, gradually, there was a decided improvement in both attendance and class work.

After regular habits were formed and medical attention given where needed the most difficult problems were solved. The average attendance for this year is 97.5% in the place of 89% last year.

Adams School has the platoon system in class work and it has been very satisfactory for sight saving class work. At first this was rather bewildering, as the program was quite different each day of the week, but it was soon found that this change was attractive and restful.

Two pupils graduated from the eighth grade last year. One is doing good work in high school and the other has a position in a garment factory. They often come back for advice and help, so they still feel that they are part of the class.

The pupils in these classes have learned that no handicap can wholly defeat them and that courage and industry bespeak success and promotion.

## **APPENDIX**

### **LEGISLATION RELATING TO THE ESTABLISHMENT AND MAINTENANCE OF SIGHT SAVING CLASSES**

**As Amended by the Johnston-Ott and Williams Bills Passed  
in 1925**

Sec. 7755. The director of education may grant permission to any local board of education to establish and maintain a class or classes for the instruction of deaf or blind persons over the age of three, or of crippled persons over the age of five.

Sec. 7755-1. The director of education may arrange with any board of education which maintains a class for the instruction of blind, deaf or crippled persons, or affords special instruction for such children non-resident of the district, to pay for the board of any such persons under such standards and with such restrictions as the director of education may prescribe.

Sec. 7755-2. If a child resident of one school district attends in another district a class for the blind, deaf, or crippled, or a class in which some special instruction needed by the child because of his handicap is provided, the board of education of the district in which he resides may pay his tuition in a sum equal to the tuition in the district in which such class is located for a child of normal needs of the same school grade. The board of education of the district in which such child resides may pay for his transportation to the class in the other district; and the board of education of the district in which the class he attends is located may provide his

transportation to the class. Upon direction of the director of education the board of education of the district in which such child resides shall pay for his transportation and tuition.

Sec. 7755-5. If a child is handicapped by two of the defects mentioned in section 7755, General Code, the director of education may allow him to be counted as a full-time pupil among those with each kind of defect in determining the state's contribution to the classes for such children, provided the types of work and attention necessary for both types of children are afforded him.

Sec. 7757. At the close of each school year, the board of education of each school district in which any such classes for the education of the blind, deaf or crippled are maintained, or any such children are instructed as provided in section 7755-4, or boarded as provided in section 7755-1, or in connection with which any such children are transported as provided in section 7755-2 or 7755-3 may certify to the director of education the names and residences of the persons instructed in such special classes and the period of time each was instructed and the names and residences of the persons boarded or transported under these sections at the expense of the board of education and the period of time each was transported or boarded; and the amount expended for special appliances and for the current operating cost of the education of such pupils, together with statements showing the per capita cost of the education of normal children in the district in the same school grades during the same period of time. The director of education shall be the final authority in deciding all questions relative to what constitutes special appliances

and current operating costs under the terms of this section.

Sec. 7758. The director of education, upon receipt and approval of the report and financial statement provided in section 7757, shall present a voucher to the auditor of state in favor of the board of education in an amount equal to the costs of maintaining such special classes and instruction, minus the cost of the instruction of the same number of children of normal needs in the same school grades of the district, but in an amount not to exceed three hundred and seventy-five dollars for nine months in the case of the blind, and three hundred dollars in the case of the deaf or crippled, and proportionate amounts for those instructed more or less than nine months. He shall include in such voucher the cost of boarding persons included in the provisions of section 7755-1 at a rate of not to exceed two hundred fifty dollars for each person so boarded for nine months during the school year and a proportionate amount for each person boarded for more or less than nine months. He may also at his discretion include the costs of transportation under section 7755-2 or 7755-3 in the voucher in favor of any board of education which has paid the same. Upon presentation of such voucher the auditor of state if satisfied as to the correctness shall draw a warrant on the treasurer of state for the amount.

Sec. 7759. Teachers in such schools shall be appointed as are other public school teachers. They shall possess the usual qualifications required of teachers in the public schools, and in addition thereto such special training and equipment as the state director of education or the board of education may require. The so-called oral system shall be taught by such teachers in such schools for the deaf. If, after a fair trial of nine

months, any of such children in any school for the deaf for any reason are unable to learn such method, then they may be taught the manual method in a separate school, providing, however, that there are not fewer pupils than provided in section 7755 of the General Code.

Sec. 7760. Any person of sound mind who, by reason of defective hearing or vision or by reason of being so crippled as to be physically unable to properly care for himself without assistance, cannot properly be educated in the public schools as other children, shall be considered deaf, blind or crippled within the meaning of sections 7755 and 7757, General Code. But persons with partial hearing or partial vision may also be instructed under the provisions of these sections and of standards prescribed under section 7761.

Sec. 7761. The director of education shall select some competent person or persons to inspect all classes established under section 7755, General Code, at least once a year, and to report concerning the instruction in such classes, the conditions under which they are maintained and the conditions under which such persons are boarded.

The director of education shall prescribe standard requirements for day schools for the deaf, blind and crippled, and other instruction of such children entitled to state reimbursement, which requirements shall include the conditions under which such schools are conducted, the methods of instruction and supervision, the qualifications of teachers and the conditions and terms under which they are employed, the special equipment and agencies for instruction provided, and the conditions of the rooms and buildings in which the schools are held.

Sec. 7761-1. The director of education shall have authority to arrange a plan of cooperation among boards of education which maintain special classes for the blind, for investigation into broader opportunities for the future employment of the pupils and better methods for their instruction. The cost of such investigation shall be charged to the current operating cost of the school for the blind. The director of education shall prescribe the minimum standard requirements concerning the extent of such cooperation and the general methods of such investigation.

Sec. 7763-5. In the case of a blind, partially blind, deaf or crippled child or a child of defective mentality an excuse granted under section 7763 or 7763-4, General Code, on the ground of bodily or mental condition shall not be a valid excuse from attendance by the child upon a day school for the blind, deaf, crippled or those of defective mentality or from attendance at a state institution for the care and instruction of the blind, deaf, crippled or those of defective mentality unless in the case of a day school there are factors in the child's condition or the means of reaching the school which make attendance at such a special class impracticable. If there is a day school for children handicapped in one of the above respects in the school district, or in another district and transportation to such class by school conveyance or common carrier is provided by a board of education or other agency, the superintendent of schools shall be the judge of the practicability of the child's attendance at such school adapted to the needs of children handicapped in the particular respect.

## PREScribed STANDARDS FOR SIGHT SAVING CLASSES

Sec. 7761 of the General Code of Ohio reads as follows:

"The director of education shall prescribe standard requirements for day schools for the deaf, blind and crippled, and other instruction of such children entitled to state reimbursement, which requirements shall include the conditions under which such schools are conducted, the method of instruction and supervision, the qualifications of teachers and the conditions and terms under which they are employed, the special equipment and agencies for instruction provided, and the condition of the rooms and buildings in which the schools are held."

These standard requirements are not intended as complete statements of the conditions under which a board of education should conduct such classes, but are more properly speaking, minimum requirements with which, in the judgment of this office, any board of education should comply to entitle them to state recognition.

School districts shall comply with these regulations to receive the state subsidy authorized by section 7757 of the General Code of Ohio.

### I. Eligibility of Pupils

#### a. *Definition of Blindness.*

The definition of blindness under this law reads as follows: "Any person of sound mind, who, by reason of defective \* \* \* vision \* \* \* cannot properly be educated in the public schools as other children, shall be considered \* \* \* 'blind' \* \* \* within the meaning of sections 7755 and 7757 General Code. But

persons with \* \* \* partial vision may also be instructed under the provisions of these sections and of standards prescribed under section 7761."

The state grant, under section 7757 General Code, will not be allowed for any pupil until the state director of education or one delegated by him shall be satisfied that the child is blind under the terms of the law; such evidence shall be submitted upon a form supplied by this office.

b. *Eye Conditions.*

The following cases should be referred to sight saving classes.

- (1) Children who cannot read more than 20/70 on a standard Snellen chart in the better eye, or who cannot read No. 2.00 at 20 C. M.
- (2) Myopes who have more than 6 diopters of myopia and under 10 years of age.
- (3) Children who have 3 diopters of myopia which are progressive.
- (4) Hyperopes who have symptoms of asthenopia and whose vision in their best eye falls below 20/70.
- (5) Children who have an astigmatism of more than 3.5 diopters and whose vision cannot be brought up to more than 20/70, in the better eye.
- (6) Children with corneal opacities whose vision is 20/50 or less in better eye.
- (7) Cases of inactive keratitis where vision is 20/50 or less in better eye.
- (8) Children having congenital cataracts, secondary cataracts, congenital malformation, or fundus lesions where no acute condition is present, with vision of 20/50 or less in the better eye.

NOTE 1. Any child who, in the oculist's opinion would benefit by sight saving training will be accepted subject to the suggestions of the oculist for treatment or training.

NOTE 2. It is assumed that these conditions exist after the proper refractions have been made.

*c. Mentality.*

Children shall be admitted on the basis of a mental test approved by the State Department of Education.

*d. Co-Educational Plan.*

Children in sight saving classes are to do all the oral work possible in the grade rooms with children of normal sight. The amount of work to be done by such pupils in the regular class room is to be decided by the supervisor after consultation with sight saving class teacher and oculist.

## **II. Sight Saving Class Room**

*a. Room.*

Special class rooms for sight saving classes shall be of average size and be approved by a representative of the State Department of Education.

*b. Blackboard.*

An adequate amount of blackboard space, not less than that provided in a regular class room, must be provided, such blackboards to be of slate and in good condition. Blackboard trays should be placed about twenty-six inches from the floor.

*c. Decorations.*

Rooms should be decorated with some coating producing a dull finish. The color should be a neutral tint, such as buff or French gray with a dull white or cream

ceiling. Walls and ceilings must be kept in good condition to be able to meet the approval of the State Department of Education.

*d. Window Space.*

In class rooms for partially sighted children, window sills shall not be more than forty inches from the floor and the window glass area shall equal not less than one-fifth of the floor space. Unilateral lighting with the light at the left of the pupil is preferable.

*e. Orientation.*

The most desirable direction of the sources of light are in order of preference — northeast, north or east, north and east, northwest, north and west. *A south exposure should be avoided.* Walls containing windows shall in all cases be adjacent.

*f. Window Shades.*

The window shades for each window should be provided. These should be placed in the middle so that shades may be raised and lowered from the middle. Shades should be of a neutral colored material which is sufficiently translucent to transmit a considerable percentage of light while at the same time diffusing it.

*g. Surface Finish.*

Walls, wood work, desk tops, blackboard and all paper should be finished with a dull mat surface to prevent glare.

*h. Artificial Light.*

Rooms shall be equipped with scientifically planned electric lighting systems for use on cloudy days. Before installation of such lighting systems the supervisor of the sight saving classes should be consulted.

### III. Size of Classes

Under no condition shall one teacher be assigned more than sixteen pupils. In case there are four or more grades enrolled no teacher shall be assigned more than twelve pupils without the consent of the supervisor. In no school district having more than one sight saving class shall more than five grades be assigned to one teacher.

### IV. Administration

#### a. *Supervision.*

School districts establishing sight saving classes shall employ expert supervision under conditions and subject to reimbursement on approval of the director of education.

Section 7761 General Code. "The director of education shall select some competent person or persons to inspect all classes established under Section 7755 General Code, at least once a year, and to report concerning the instruction in such classes, the conditions under which such persons are boarded \* \* \*."

#### b. *Assignment of Teachers.*

Qualifications of teachers of sight saving classes appointed by local boards of education and the conditions and terms under which they are employed are subject to the approval of the director of education.

#### c. *Salaries of Teachers.*

Teachers of sight saving classes shall receive an annual compensation of not less than one hundred fifty dollars per year more than teachers of the same training and experience teaching in the same school district.

*d. Clerical Service.*

Reimbursement shall be made for such clerical service as is necessary in the office of the supervisors of sight saving classes subject to the approval of the state director of special classes.

*e. New Classes.*

No new rooms for sight saving classes shall be opened without the written approval of the director of education, if such classes are to be subsidized by the state.

**V. Equipment and Supplies**

a. Items of ten dollars or more for major equipment and supplies shall be approved by the state director of special classes before purchase is made.

b. Capital equipment purchased with state reimbursement shall be held as the property of the state.

c. A list of equipment and supplies necessary for a sight saving class may be had on application to the state director of special classes. This list should be determined by the supervisor and the state director of special classes.

**VI. Special Appliances and Current Operating Cost**

Section 7757 General Code. \* \* \* "The director of education shall be final authority in deciding all questions relative to what constitutes special appliances and current operating cost under the terms of this section." For the guidance of boards of education this office has prepared the following definition of "Special appliances" and of "Current Operating Cost".

*a. Special Appliances.*

Typewriters.

Clear type books.

Educational models and specimens.

Charts.

Special maps.

Special globes.

Desks (when a design not in common use in the city public school system is purchased for such classes).

Musical instruments (when used for instrumental musical instruction).

Special electric lighting equipment for sight saving classes. (The cost of such electric lighting equipment may not be charged against such a department when such expense is incurred in the fitting up of a room to take the place of another room in the school system already furnished with such special electric equipment.)

Special cupboards.

Special culinary equipment necessary to the proper conduct of sight saving classes.

*b. Current Operating Cost.*

1. Salaries—Compensation of special teachers.

Student readers.

Special supervisors.

Necessary clerical help in supervisor's office.

Compensation of special and attending ocu-lists.

2. Transportation—Carfare of pupils, guides and itinerant teachers.

Compensation of guides.

Traveling expenses of special supervisors on school business.

3. Educational supplies.
  4. School feeding—Cost of school feeding, including cost of materials used, and compensation of persons preparing and serving such materials.
  5. Research—Cost of investigation into broader opportunities for future employment of blind and sight saving pupils and into better methods for their instruction.
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NOTE: If any information is desired relative to classes for totally blind it may be obtained at this department.

## DIRECTORY — SCHOOL YEAR 1926-27

<i>City</i>	<i>Building</i>	<i>Teacher</i>	<i>Supervisor</i>
Akron .....	Bowen .....	Rose Hoskins .....	Olive Peck
Alliance .....	Libery .....	Osie Stahl .....	Olive Peck
Ashtabula .....	Division St. ....	Lillie Newman .....	Olive Peck
Barberton .....	Lincoln .....	Donna Shorder .....	Olive Peck
Campbell .....	Penhale .....	Fay Wilcox .....	Olive Peck
Canton .....	Wells .....	May Wood Briner .....	Olive Peck
Cincinnati .....	Bloom Jr. High.....	Ada Cowdry .....	Estella Lawes
Colombian .....	.....	Marie Riley .....	Estella Lawes
Dyer .....	.....	Edith Fisher .....	Estella Lawes
Mann .....	.....	Laura B. Cunningham .....	Estella Lawes
Sands .....	.....	Ella Hodges .....	Estella Lawes
		Dorothy Brewer .....	Estella Lawes
Cleveland .....	Addison .....	Jennie Strom .....	Helen J. Coffin
	Almira .....	Effie C. Eger .....	Helen J. Coffin
	Boulevard .....	Iva M. Reed .....	Helen J. Coffin
		Florence Dildine .....	Helen J. Coffin
		Josephine Schooley .....	Helen J. Coffin
		Evelyn F. Hall .....	Helen J. Coffin
		Lois E. Miller .....	Helen J. Coffin
	Gladstone .....	Mrs. Eleanor C. Cudmore	Helen J. Coffin
		Adda Baker .....	Helen J. Coffin
		Mrs. Florence Smith .....	Helen J. Coffin
		Martha Laing .....	Helen J. Coffin
		Elizabeth D. Caldwell....	Helen J. Coffin

Kennard .....	Hazel O. Black .....	Helen J. Coffin
Memorial .....	Mary A. Keenan .....	Helen J. Coffin
Miles Standish .....	Grace Henry .....	Helen J. Coffin
Rawlings .....	Shirley Peck .....	Helen J. Coffin
Thomas Jefferson .....	Margaret McKenzie .....	Helen J. Coffin
Waring .....	Margaret Betz .....	Helen J. Coffin
Washington Irving .....	Anne Kessner .....	Helen J. Coffin
Cleveland Heights.....	Jenny Hansen .....	Helen J. Coffin
Columbus .....	Ruth Nickard .....	Olive Peck
E. Main Street .....	Myrtle McPeak .....	Alice Burdge
Irving .....	Della Griffith .....	Alice Burdge
Dayton .....	Lois Gordon .....	Alice Burdge
Patterson .....	Anna Goehring .....	Alice Burdge
Hamilton .....	Mildred Wittman .....	Alice Burdge
Lima .....	Faurot .....	Alice Burdge
Lorain .....	Irene Stager .....	Alice Burdge
Mansfield .....	Ruby Haines .....	Olive Peck
Middletown .....	Mary Hughes .....	Olive Peck
Norwalk .....	North .....	Alice Burdge
Oak Harbor .....	Benedict .....	Olive Peck
Portsmouth .....	Grade .....	Olive Peck
Sandusky .....	Garfield .....	Estella Lawes
Springfield .....	Barger .....	Olive Peck
Toledo .....	Bushnell .....	Alice Burdge
Warren .....	La Grange .....	Olive Peck
	Lincoln .....	Olive Peck
	Navarre .....	Olive Peck
	Navarre .....	Olive Peck
	Roosevelt .....	Olive Peck

<i>City</i>	<i>Building</i>	<i>Teacher</i>	<i>Supervisor</i>
Youngstown .....	Adams .....	Gertrude Purdy .....	Olive Peck
Monroe .....	Rachael Thomas .....	Rachael Thomas .....	Olive Peck
Princeton .....	Florence Gibson.....	Florence Gibson.....	Olive Peck

ADDRESSES OF SUPERVISORS

Miss Alice Burdge — Sands School — Cincinnati.  
 Miss Helen Coffin — Board of Education — Cleveland.  
 Miss Estella Lawes — Sands School — Cincinnati.  
 Miss Olive Peck — Board of Education — Cleveland.

PSYCHOLOGIST AND RESEARCH AGENT

Miss Edith Taylor — Board of Education — Cleveland.







